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SOAH DOCKET NO. 473-21-0538 PUC DOCKET NO. 51415

2020 NOV 24 PM 2: 38

APPLICATION OF SOUTHWESTERN	§	BEFORE THE STATE OFFICE
ELECTRIC POWER COMPANY FOR	§ §	OF
AUTHORITY TO CHANGE RATES	§	ADMINISTRATIVE HEARINGS

SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO COMMISSION STAFF'S FOURTH REQUEST FOR INFORMATION

NOVEMBER 24, 2020

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SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO COMMISSION STAFF'S FOURTH REQUEST FOR INFORMATION

Question No. Staff 4-1:

Provide a list of all Vegetation Management (VM) jobs performed during the test year. Include the circuit/feeder name and total cost. Also include the miles or feed of vegetation trimmed and state if the trimmed area was single phase or three phase.

Response No. Staff 4-1:

Please see the Company's response to Staff 2-15 for all mechanical/manual clearing and Staff 4-1 CONFIDENTIAL Attachment 1 for all herbicide applications.

Staff 4-1 CONFIDENTIAL Attachment 1 responsive to this request is CONFIDENTIAL MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Paul D. Flory Title: Regulatory Consultant Sr

PROJECT NO. 41381

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REPORT FOR ELECTRIC UTILITY VEGETATION MANAGEMENT REQUIRED BY 16 TAC §25.96

PUBLIC UTILITY COMMISSION OF TEXAS

SOUTHWESTERN ELECTRIC POWER COMPANY'S REPORT ON VEGETATION MANAGEMENT REQUIRED BY 16 TEX. ADMIN. CODE § 25.96

NOW COMES Southwestern Electric Power Company (SWEPCO), an American Electric Power (AEP) operating company providing bundled electric service in the state jurisdictions of Texas, Arkansas, and Louisiana within the Southwest Power Pool (SPP), and files the attached Report on Vegetation Management pursuant to 16 Tex. Admin. Code § 25.96 (TAC).

Dated: May 1, 2020

Respectfully submitted, American Electric Power 400 W. 15th Street, Suite 1520 Austin, Texas 78701 Jerry N. Huerta State Bar No.24004709 Telephone: (512) 481-3323 Facsimile: (512)481-4591

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ATTORNEY FOR SOUTHWESTERN ELECTRIC POWER COMPANY

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SOUTHWESTERN ELECTRIC POWER COMPANY'S REPORT ON VEGETATION MANAGEMENT REQUIRED BY 16 TEX. ADMIN. CODE §25.96

Regulatory Contact: Jonathan Griffin Phone: 512-481-4565 Fax:512-481-4591 Email:jmgriffin@aep.com

May 1, 2020

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I. INTRODUCTION

16 TAC § 25.96(f) of the Public Utility Commission of Texas' (PUC or Commission) substantive rules requires each utility to file a Vegetation Management Report (Report) summarizing its Vegetation Management Plan (Plan) for the current calendar year and the progress in implementing its Plan for the preceding calendar year. The Report must be filed by May 1 of each year.

Pursuant to 16 TAC §25.96, Southwestern Electric Power Company (SWEPCO or the Company) submits the following information addressing its vegetation management activities regarding the Company's distribution assets. This Report includes information responsive to each subsection of 16 TAC §25.96. It provides an overview of SWEPCO's organization and discusses the process for carrying out its vegetation management planning activities.

SWEPCO provides bundled electric service in its Texas jurisdictional service area, including electric delivery service to its customers in northeast Texas and parts of the Panhandle within the Southwest Power Pool region. SWEPCO serves approximately 185,000 retail customers in 24 Texas counties. SWEPCO's service area covers approximately 10,000 square miles and includes a distribution system with over 8,500 pole miles of overhead lines. SWEPCO also provides bundled service to customers in Arkansas and Louisiana.

II. SWEPCO'S REPORT

\$25.96. Vegetation Management

- (f) Vegetation Management Report
- (1) A Vegetation Management Plan summary including, at a minimum, a summary of the utility's:
- (A) vegetation maintenance goals and the method the utility employs to measure its progress;

SWEPCO's vegetation management goal is to reduce the number of vegetation-

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related outages to the greatest extent reasonably possible. SWEPCO's vegetation management program is designed to improve and maintain the quality of service to the Company's customers. It is a comprehensive program for pruning and clearing vegetation along SWEPCO's distribution circuits in an environmentally sound and cost-effective manner that provides safe and reliable service to customers.

Currently, SWEPCO uses a performance-based approach rather than a cycle-based approach for vegetation management in Texas. The performance-based approach allows SWEPCO to address the circuits with the greatest need for vegetation management. Each fall, the following year's annual vegetation plan is developed based on current circuit performance. The annual vegetation management work plans are flexible and dynamic. Inputs into the work plans include historical reliability data, line inspections, customer density, circuit performance, weather impacts, customer complaints, and the time elapsed since vegetation management was last performed. Circuit performance improvement is measured by comparing various reliability metrics before and after maintenance.

Customer education, service, and satisfaction are very important aspects of achieving the Company's vegetation management goals. SWEPCO uses a variety of customer information brochures, booklets, and door hangers to communicate tree and power line issues with customers before trimming their trees. The brochure entitled "Understanding Line Clearing Efforts" describes in particular the tree trimming effort. SWEPCO personnel employ door-to-door communication with customers in an attempt to inform affected persons of pending vegetation management activity. In addition to or in the absence of personal contact, SWEPCO personnel leave a door hanger explaining the nature of the work planned, including contact information should the customer wish to call and discuss further.

In cases where tree removal is necessary, a tree removal agreement may be established with the customer prior to the work being performed. Again, in the absence of personal contact, a door hanger explaining planned activity and customer representative contact information is provided. Contractors are not permitted to remove trees without prior SWEPCO authorization.

SWEPCO uses contractors to fulfill the goals and objectives of the vegetation

management plan. To reinforce the relationship and expectations between an AEP operating company (including SWEPCO) and the contractor, the AEP System Forestry Guidelines provide information on important criteria, practices, and procedures pertaining to the maintenance of Rights-of-Way (ROW). The guidelines are presented with every contract and a copy of the guidelines is provided for reference in every vegetation management contractor vehicle.

(B) Trimming clearances and scheduling approach;

SWEPCO uses vegetation management practices to control vegetation along its distribution ROWs, such as mechanized trimming, manual trimming, and herbicide applications. SWEPCO requires all tree management vendors (such as saw crews and mechanical crews) to follow the American National Standards Institute (ANSI) A300 Pruning Standards, and ANSI Z133 Safety Requirements while performing vegetation management activities, including routine vegetation management operations as well as capital improvement projects and minor storm recovery efforts.

SWEPCO employs a process that includes:

- The type of treatment (mechanical, manual, herbicide) to be used based on tree types and environmental conditions;
- · A priority and schedule of treatment by line/circuit; and
- Consideration of the cost of the treatment prescribed.

Over time, the work processes utilized evolve based on changes in the size and the type of vegetation. The initial prescription for clearing an easement may include several types of activity such as trimming, removing, mowing, and herbicide application. In future years, that same easement's work plan may only include herbicide application. The SWEPCO Forestry staff and SWEPCO's contractors continuously work to ensure that the appropriate plan is utilized to provide effective and efficient vegetation management.

SWEPCO Forestry utilizes specialized line clearance and herbicide application contractors to clear easements and ROW. The work activities provided by these crews and their respective performance are audited by SWEPCO foresters or third party contract

foresters. It is the forester's responsibility to ensure that the line clearance work is performed following National Electrical Safety Code (NESC) Standards in a timely manner, at a reasonable cost, and with consideration to customers and the general public.

With regard to distribution power lines, SWEPCO employs a minimum clearance for distribution power lines, which is the distance that will prevent re-growth into conductors for at least four years. The species, site conditions, limb and conductor sag and sway during windy conditions, plus the effect of electrical load, are considered when determining the clearance requirement. Insufficient clearance is addressed during clearance audits. SWEPCO trimming clearances are based on tree species. Fast growing species, such as Sycamore and Pine, are trimmed for 20-foot minimum clearance from the primary conductor. Medium and slow growing species like Live Oak and Ornamentals are trimmed for 15-foot minimum clearance from the primary conductor. In a situation in which a customer refuses trimming, SWEPCO seeks to negotiate a 10-foot clearance; however, 10 feet is the minimum clearance because NESC Standards provide that non-line clearance certified tree trimmers cannot get closer than 10 feet to an energized power line. In practice, SWEPCO trimming exceeds the clearances recommended by ANSI and are consistent with NESC Standards. This is due primarily to the tree species indigenous to the northeast Texas piney woods and average annual rainfall of close to 50 inches.

(C) Plan to remediate vegetation-caused issues on feeders that are on the vegetation-caused, worst performing feeder list for the preceding calendar year's SAIDI and SAIFI;

SWEPCO Distribution and Forestry personnel evaluate the feeders that experienced vegetation-specific outages which impact the System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI). The vegetation-specific outages are addressed on an as-needed basis and in the annual vegetation management work plan, as described in section (A) above. As outages occur, SWEPCO's distribution employees inspect the cause of the outage. If the outage is determined to have been caused by vegetation, SWEPCO distribution supervisory personnel, including Forestry, classify the incident accordingly and determine a course of action.

(D) Tree risk management program;

SWEPCO does not have a separate or stand-alone tree risk management program. Other than hazard trees identified during normal vegetation management work, at-risk tree identification and mitigation is part of the day-to-day operations and maintenance of SWEPCO. At-risk tree work is budgeted as part of the long-term and short-term vegetation management work plan budget.

(E) Approach to monitoring, preparing for, and responding to adverse environmental conditions such as drought and wildfire danger that may impact its vegetation management policies and practices;

SWEPCO personnel address drought and wildfire issues as emergency events and respond accordingly. As potential occurrences develop that could impact SWEPCO facilities, the threat is addressed with the appropriate mitigation plan to help limit the number of outages it could possibly produce.

SWEPCO has over 500 full time employees in Texas and most work in the field every day and, as a result, are intrinsically in tune with conditions in the Company's service area environment. In their normal course of performing their work responsibilities, these employees serve as monitors and provide input for planning, preparing, and responding to adverse environmental conditions. SWEPCO's vegetation management policies adhere to national safety and vegetation management policy and code, but remain flexible in order to respond to changing environmental conditions.

- (F) Total overhead distribution miles in its system, excluding service drops; SWEPCO Texas jurisdiction has over 8,500 pole miles of overhead lines in its system.
- (G) Total number of electric points of delivery;
 SWEPCO service delivery points in Texas total 190,356.
- (H) Amount of vegetation-related work it plans to accomplish in the current

calendar year to achieve its vegetation management goals described in subparagraph (A) of this paragraph; and

The following is the projected vegetation maintenance work SWEPCO plans to accomplish in 2020.

Projected Saw Miles	350	
Projected Mow/Spray Miles	1,000	
Projected Total Miles	1,350	

- (I) Vegetation management budget, divided into the categories listed below. The utility should, within the confines of its own budgeting practices, assign subcategories and list them under these categories where appropriate. If a utility does not budgetamounts under any specific category, the utility shall provide a brief explanation of why it does not do so. The utility shall title the budget with the dates it covers and provide a total for each category or subcategory.
 - (i) Scheduled vegetation maintenance;
 - (ii) Unscheduled vegetation maintenance;
 - (iii) Tree risk management; and

In SWEPCO's most recent base rate case, the Commission authorized annual vegetation management spending of \$9.3 million.¹ The Commission also authorized an additional amount of O&M spending of \$634 thousand.² The Company plans its vegetation management spending each year to achieve the sum of these amounts.

SWEPCO does not have a separate or stand-alone tree risk management program. The trees that are identified during circuit patrols as at risk of coming into contact with the distribution system are managed through the regular annual Distribution Vegetation Management Plan.

¹ Application of Southwestern Electric Power Company for Authority to Change Rates, Docket No. 46449, Order on Rehearing at Findings of Fact 206 and 208 (Mar. 19, 2018).

² Id., at Finding of Fact 118.

(iv) Emergency and post-storm activities.

Emergency and post-storm costs for major storms such as ice storms, tropical storms, and/or other wide spread thunderstorms that produce major damage are not included in the normal distribution forestry budget.³ An additional \$719,658 was spent in 2019 on these storm recovery efforts. The normal distribution budget does include an estimate for minor storm costs, such as localized storm events that produce minor damages. Below is a recent historical trend of SWEPCO's expenses on storm recovery efforts.

TEXAS STORM COSTS

	MAJOR	MINOR
2015	\$570,046	\$89,917
2016	\$173,524	\$105,919
2017	\$657,558	\$207,515
2018	\$108,534	\$65,442
2019	\$719,658	\$269,362
	\$2,229,320	\$738,155

- (2) An implementation summary for the preceding calendar year including, at a minimum, a description of:
- (A) Whether the utility met its vegetation maintenance goals and how its goals have changed for the coming calendar year based on the results;

SWEPCO planned 720 miles of vegetation maintenance in Texas in 2019. SWEPCO completed more than this amount during the calendar year; however, a portion of the budgeted 2019 amount remains to be spent in 2020. That amount of \$575 thousand resulted from a postponement and rescheduling of work caused by a major storm event in May 2019 in

³ Consistent with 16 TAC § 25.52(c)(2)(D), SWEPCO defines a major event as an interruption causing loss of power to 10% or more of the customers in a region over a 24-hour period and with all customers not restored within 24 hours.

SWEPCO's service area. It will be spent in 2020, and it will not reduce or otherwise affect SWEPCO's 2020 distribution vegetation management budget or plan. SWEPCO's goal for the current year is described above.

(B) Successes and challenges with the utility's strategy, including obstacles faced, such as property owner interference, and methods employed to overcome them;

The increased budget authorized by the Commission in SWEPCO's last two base rate cases has allowed the Company to schedule more vegetation management activity than it had previously. SWEPCO completed 883 miles of vegetation management during 2019. As described in the section above, SWEPCO postponed a limited amount of work to 2020 due to a major storm event in its service area during 2019.

(C) The progress and obstacles to remediating issues on the vegetation-caused, worst performing feeders list as submitted in the preceding year's Report;

SWEPCO's Forestry department analyzes the worst performing circuit (WPC) reports provided by the performance management group. Before creating a work plan, the Forestry department takes into consideration recommendations from local operations managers, in addition to reviewing the customer density on circuits and the last time work was performed on a circuit. Trimming a circuit is a systematic process that is succeeded in the following year by inspection for other mechanical failures that cause decreased reliability, as well as application of herbicide to prevent rapid growing vegetation from negatively impacting reliability. Vegetation management programs along with other reliability programs have led to significant improvement in SAIDI and SAIFI for those specific circuits.

(D) The number of continuing education hours logged for the utility's internal vegetation management personnel, if applicable;

In 2019, SWEPCO's internal vegetation management personnel completed 0 continuing education hours.

(E) The amount of vegetation management work the utility accomplished to achieve its vegetation management goals described in paragraph (I)(A) of this subsection;

SWEPCO performed 883 miles of vegetation management in 2019.

(F) The separate SAIDI and SAIFI scores for vegetation-caused interruptions for each month and as reported for the calendar year in its Service Quality Report filed pursuant to §25.52 (Reliability and Continuity of Service) and §25.81 (Service Quality Reports), at both the feeder and company level;

Please see the attachment for the separate SAIDI and SAIFI scores for vegetationcaused interruptions on a feeder and company level for each month of 2019 for SWEPCO.

- (G) The vegetation management budget, including, at a minimum:
 - (i) a single table with columns representing:
 - (I) The budget for each category and subcategory that the utility provided in the preceding year pursuant to paragraph (1)(I) of this subsection, with totals for each category and subcategory;
 - (II) The actual expenditures for each category and subcategory listed pursuant to sub clause (I) of this clause, with totals for each category or subcategory;
 - (III) The percentage of actual expenditures over or under the budget for each category or subcategory listed pursuant to sub clause (I) of this clause; and
 - (IV) The actual expenditures for the preceding reporting year for each category and subcategory listed pursuant to sub clause (I) of this subparagraph, with totals for each category or subcategory;
 - (ii) An explanation of the variation from the preceding year's vegetation management budget where actual expenditures in any category or

subcategory fell below 98 percent or increased above 110 percent of the budget for that category;

As described earlier in this Report, the Commission authorized additional spending in SWEPCO's most recent base rate case, in the annual amount of \$9.934 million. A one-time, retroactive amount of \$1.9 million was also authorized, and was spent during 2018. During 2017, the Company diverted all contracted tree personnel for one month of the third quarter to aid coastal utilities rebuilding their systems and restoring power to the many customers who lost service as a result of Hurricanes Harvey and Irma. This led directly to a portion of the \$6.8 million authorized for 2017 being spent in 2018. During 2019, a major storm event in SWEPCO's service area caused the postponement of a limited portion of the 2019 plan until 2020. This will not reduce or otherwise affect SWEPCO's 2020 distribution vegetation management budget or plan. The full, Commission-authorized, annual amount remains in the budget.

The table below illustrates SWEPCO's year-to-year vegetation management program spending, in millions of dollars:

Year	2019	2018	2017	2016	2015
Base Spend	\$9.934	\$11.834	\$6.8	\$6.8	\$6.8
Actual Spend	\$9.358	\$13.016	\$5.618	\$6.45	\$7.3

(iii) The total vegetation management expenditures divided by the number of electric points of delivery on the utility's system, excluding service drops;

\$9,358,000 / 190,356 Service Delivery Points = \$49.16

In this context, service delivery points represent metered and unmetered points of service delivery.

(iv) The total vegetation management expenditures, including expenditures from the storm reserve, divided by the number of customers the utility served; and,

\$9,358,000 / 186,258 Customers = \$50.24

(v) the vegetation management budget from the utility's last base-rate case;

In SWEPCO's most recent base rate case. Docket No. 46449, the Company was granted authorization for \$9.934 million in distribution vegetation management funding to enable the targeting of more circuits for the benefit of more of its customers. The Company plans its vegetation management activities each year to achieve that level of spending.

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AEP Southwestern Electric Power Company

Vegetation influence on annual reliability indices - influence on 'scheduled' cannot be determined

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System Vegetation SAIDI	Annual	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Forced 2019	123.72	4.62	4.33	11.50	21.64	17.06	23.34	5.26	9.64	7.86	12.86	4.85	0.76
2015	123.72	4.02	4.55	11.50	21.04	17.00	20.04	0.20	3.04	7.00	12.00	4.00	0.70
Scheduled													
2019		1											
Outside Causes													
2019	4.67	0.24	0.01	0.02	0.40	1.31	1.92	0.01		0.04	0.71		
W.: F													
Major Events 2019	165.72				0.07	88.47	39.66	37.42		Т	0.10	Т	
2010	100.12					00.171		<u> </u>			0.101		-
System Vegetation SAIFI	Annual	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Forced 2019	0.733	0.035	0.039	0.043	0.099	0.083	0.124	0.050	0.076	0.048	0.099	0.029	0.009
2019	0.733	0.035	0.039	0.043	0.099	0.003	0.124	0.030	0.076	0.046	0.099	0.029	0.009
Scheduled													
2019													
Outside Causes													
2019	0.059	0.015	0.000	0.001	0.010	0.011	0.016	0.001		0.000	0.004	T	
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Major Events 2019	0.266	Т			0.001	0.075	0.101	0.088		т	0.000		

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Distribution Feeder Indices for <u>Vegetation-Caused Forced Interruptions</u>

List all Distribution Feeders on Texas System

Total Number of Feeders

276

With 10 or more Customers

Add or Delete Rows as Necessary

AEP Southwestern Electric Power Company

Feeder Identification	Substation Identification	Number of Customers	2019 SAIDI Vegetation	2019 SAIFI Vegetation	
96220	TAYLOR STREET	1,298	4.75	0.045	
96580	MARSHALL 69KV	837	129.10	1,774	
96590	MARSHALL 69KV	727	114.36	1.048	
961380	LAKE LAMOND	1,927	126.14	0.447	
961480	WHITNEY	1,607	230.20	1.844	
961490	WHITNEY	1,441	56.66	0.192	
961620	NEW BOSTON	959	26.82	0.404	
961780	SOUTHEAST LONGVIEW	582	45.53	0.232	
961900	FRIARS SWITCH	189	19.64	1.079	
961920	MT PLEASANT	139	0.00	0.000	
961930	MT PLEASANT	1,126	123.71	1.103	
961950	DAINGERFIELD	163	23.47	0.202	
961960	DAINGERFIELD	1,147	63.09	0.381	
961970	DAINGERFIELD	663	53.80	0.347	
962000	MARSHALL 69KV	238	77.44	0.441	
962040	WINNSBORO	513	0.36	0.004	
962050	WINNSBORO	1,160	12.74	0.162	
962120	NEW HOPE	494	357.34	1.300	
962140	ATLANTA	1,740	73.57	0.606	
962150	ATLANTA	622	91.93	0.490	
962180	CENTER	42	0.00	0.000	
962190	CENTER	1,013	127.92	0.654	
962200	BALDWIN	20	0.00	0.000	
962230	12TH STREET	89	78.58	1.101	
962260	LOUISIANA PACIFIC	717	817.25	3.577	
962370	SUGAR HILL	371	14.73	0.065	
962430	DEKALB	887	16.07	0.156	
962440	DEKALB	525	84.35	0.272	
962450	GILMER	913	454.31	2.027	
962480	GILMER	600	174.03	2.012	
962490	GILMER	1,563	145.18	1.264	
962500	TENAHA	404	65.48	0.611	
962510	TENAHA	342	107.74	0.991	
962520	HAWKINS	397	23.68	0.055	
962530	HAWKINS	99	754.15	1.485	
962540	LINDEN	927	84.13	0.468	
962610	39TH STREET	133	0.00	0.000	
962630	39TH STREET	1,327	93.65	0.216	
962640	39TH STREET	515	107.67	1.122	
963090	KILGORE	384	599.07	0.643	

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Feeder Identification	Substation Identification	Number of Customers	2019 SAIDI Vegetation	2019 SAIFI Vegetation
963150	KILGORE	609	51.31	0.187
963200	DEKALB	400	23.00	0.285
963270	POYNTER	869	118.92	0.612
963290	NAPLES SUB	471	155.68	1.200
963350	CARTHAGE	516	110.11	1.496
963360	CARTHAGE	376	178.79	1.410
963370	CARTHAGE	502	276.11	1.896
963660	CLARKSVILLE	152	441.43	1.967
963670	CLARKSVILLE	121	1168.19	3.521
963680	MINEOLA	841	3.08	0.096
963710	WESTWOOD	43	374.21	1.814
963750	SUPERIOR	44	150.68	0.705
964020	RICHMOND ROAD	921	21.13	0.327
964070	LAKE LAMOND	1,913	67.27	1.181
964080	WHITNEY	815	64.67	0.131
964090	WHITNEY	1,037	57.31	1.041
964100	WINFIELD	101	85.55	0.406
964190	SOUTHEAST LONGVIEW	266	155.11	1.977
964290	TAYLOR STREET	892	8.70	0.137
964400	LAKE LAMOND	701	146.76	0.314
964420	WHITNEY	502	587.25	1.550
964460	ATLANTA	1,184	198.96	0.774
964630	MARSHALL 69KV	1,094	24.27	0.249
964650	KILGORE	493	6.77	0.030
965080	TAYLOR STREET	469	167.45	1.256
965110	SABINE	471	656.95	1.856
965120	SABINE	97	348.23	1.062
965130	SABINE	1,519	68.26	1.250
965140	NEW BOSTON	1,432	266.11	1.259
965190	MT PLEASANT	659	103.65	0.621
965200	LEVERETTS CHAPEL	431	696.49	1.186
965290	RICHMOND ROAD	1,337	100.57	1.303
965360	MT PLEASANT	685	117.15	1.280
965370	MT PLEASANT	1,229	46.74	0.111
965380	NORTH MINEOLA	339	21.98	0.127
965450	PITTSBURG	1,192	140.94	0.251
965460	PITTSBURG	1,398	55.24	0.293
965510	LONGVIEW	571	3.09	0.009
965520	LONGVIEW	1,168	174.74	0.955
965530	LONGVIEW	139	4.83	0.115
965540	LONGVIEW	117	134.21	1.077
965550	LONGVIEW	108	25.21	0.065
965650	HUGHES SPRINGS	551	31.81	0.098
965700	LEVERETTS CHAPEL	147	1416.28	4.735
965760	CARTHAGE	927	97.47	1.008
965770	LOGANSPORT	283	567.33	0.862

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Feeder Identification	Substation Identification	Number of Customers	2019 SAIDI Vegetation	2019 SAIFI Vegetation
965780	FRIARS SWITCH	143	42.21	0.308
965790	FRIARS SWITCH	408	326.69	1.125
965920	FRIARS SWITCH	240	209.80	1.946
965930	LONDON	474	234.95	1.281
965940	LONDON	326	205.94	1.242
965950	LONDON	304	536.49	1.201
966120	LONE STAR POWER PLANT	13	0.00	0.000
966180	12TH STREET	48	0.00	0.000
966310	HAWKINS	141	605.79	5.326
966510	MONROE CORNERS	64	645.13	2.781
966520	MONROE CORNERS	218	518.26	0.642
966550	IPC DOMINO	42	159.05	0.952
966570	TEXARKANA PLANT	76	19.38	1.013
966760	TAYLOR STREET	1,118	216.03	1.237
966770	LONGVIEW	1,042	168.18	1.130
966850	LAKE LAMOND	554	13.72	0.162
966860	LAKE LAMOND	17	0.00	0.000
966870	SPRINGHILL	1,010	3.38	0.045
966980	RICHMOND ROAD	1,427	173.06	0.687
967110	GRAND SALINE	26	10.46	0.077
967120	GRAND SALINE	2,001	322.74	0.986
967130	MINEOLA	973	88.72	0.565
967190	KILGORE	757	335.03	2.030
967240	TEXARKANA OPERATIONS	935	72.92	0.564
967300	BIG SANDY	696	224.22	1.589
967310	BIG SANDY	649	231.19	2.344
967350	BLOOMBURG	332	157.34	0.642
967580	SOUTHEAST MARSHALL	904	120.40	1.162
967590	POYNTER	986	33.98	0.218
967600	NORTH MARSHALL	672	326.01	2.464
967680	POYNTER	844	58.91	0.179
967800	POYNTER	171	105.17	1.310
967830	TEXARKANA OPERATIONS	855	1.84	0.034
967850	KILGORE	110	309.48	1.400
967860	KILGORE	374	113.12	1.305
967870	KILGORE	490	0.00	0.000
967880	KILGORE	1,507	109.62	1.260
967890	WASKOM	562	400.69	2.849
967900	WASKOM	636	92.10	0.401
967920	TAYLOR STREET	375	180.52	2.061
967960	TEXARKANA PLANT	1,347	128.58	1.131
967970	TEXARKANA PLANT	203	178.32	2.025
967980	TEXARKANA PLANT	156	36.06	0.417
967990	LIBERTY CITY	1,026	0.92	0.001
968000	NEW HOPE	1,415	46.71	0.145
968020	IPC JEFFERSON	896	142.05	1,355
968030	LOUISIANA PACIFIC	421	261.95	1.646

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Feeder Identificat		Substation Identification	Number of Customers	2019 SAIDI Vegetation	2019 SAIFI Vegetation
968040		HARRISON ROAD	2,285	187.36	0.574
968050		RICHMOND ROAD	1,301	50.51	1.062
968070		ATLANTA	256	169.52	1.926
968140		CENTER	1,059	0.41	0.003
968180	-	WASKOM	636	229.43	2.577
968190		SPRINGHILL	865	176.94	0.430
968200		SPRINGHILL	713	58.34	0.461
968370		PETTY	183	37.62	0.082
968430	100	LONGVIEW HEIGHTS	479	13.89	0.081
968440		LONGVIEW HEIGHTS	222	118.12	1.225
968570		LAKE LAMOND	781	138.25	1.754
968660		NORTH MARSHALL	633	325.31	1.840
968670		NORTH MARSHALL	851	5.76	0.049
968680		PITTSBURG	290	691.38	2.528
968720		NAPLES SUB	199	184.54	1.211
968730		NAPLES SUB	913	29.74	0.145
968980		VIVIAN	45	0.00	0.000
968990		VIVIAN	110	77.06	1.018
969000		LONGVIEW HEIGHTS	851	38.61	0.209
969030		KINGS HWY	915	74.46	0.508
969040		KINGS HWY	924	22.22	0.215
969120		BECKVILLE	302	101.84	1.189
969130		MT VERNON	459	85.53	1.131
969140		MT VERNON	400	266.67	0.988
969180	8	CLARKSVILLE	465	33.20	0.202
969190		CLARKSVILLE	1,099	167.62	0.651
969200		CLARKSVILLE	694	493.55	1.729
969210		CLARKSVILLE	799	170.39	0.373
969240		LONGVIEW HEIGHTS	977	20.39	0.142
969340		JEFFERSON 69KV	957	85.76	0.961
969350		JEFFERSON 69KV	142	1.52	0.021
969360		MINEOLA	522	10.15	0.090
969410		HAWKINS	198	186.01	1.576
969430		LAKE LAMOND	586	70.39	0.176
969440		LAKE LAMOND	341	0.77	0.009
969510		TAYLOR STREET	1,069	84.59	0.464
969520		CENTER	1,097	193.24	0.240
969540		KINGS HWY	1,838	2.72	0.060
969550		POYNTER	296	13.38	0.243
969610		NEW BOSTON	814	16.63	0.217
969620		NEW BOSTON	379	346.18	2.815
969770		LAKE LAMOND	280	15.95	0.064
969800		NORTH MARSHALL	1,064	61.26	0.353
9610020		LINDEN	336	158.29	1.524
9610090		ROSEBOROUGH	21	236.81	1.143
9610160		SOUTHEAST MARSHALL	1,856	24.59	0.153
9610170		SOUTHEAST MARSHALL	1,098	89,16	0.711

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Feeder Identification	Substation Identification	Number of Customers	2019 SAIDI Vegetation	2019 SAIFI Vegetation
9610180	SOUTHEAST MARSHALL	1,419	99.14	0.688
9610240	CARTHAGE	1,029	291.19	0.646
9610370	PLILER ROAD	3,401	281.95	2.189
9610380	PLILER ROAD	1,825	21.51	0.085
9610660	NORTH LANEVILLE	470	148.64	1.147
9610840	TATUM	721	90.56	1.043
9610850	LEVERETTS CHAPEL	357	1519.23	2.490
9610920	SOUTHEAST MARSHALL	791	51.76	0.173
9610950	HOOKS	485	28.37	0.186
9610960	HOOKS	1,330	31.80	0.346
9610990	MINEOLA	934	13.43	0.081
9611460	PETTY	514	908.54	1.860
9611470	PETTY	781	1.72	0.033
9611630	TEXARKANA OPERATIONS	677	1.20	0.010
9611870	HARRISON ROAD	2,219	8.49	0.012
9611880	HARRISON ROAD	2,080	209.17	1.486
9611894	PLEASANT HILL	21	0.00	0.000
9611970	NEW GLADEWATER	1,705	62.47	0.320
9611980	NEW GLADEWATER	1,077	507.23	2.630
9612400	ALBA	628	114.25	0.503
9612440	RED RIVER DEPOT	66	1.71	0.015
9612460	RED RIVER DEPOT	13	0.00	0.000
9612470	PLILER ROAD	3,027	2.23	0.007
9612760	MT VERNON	885	19.51	0.209
9613660	HOWELL	223	545.51	3.762
9614640	NASH	215	0.00	0.000
9614710	NASH	15	0.00	0.000
9615120	NASH	851	2.32	0.027
9615130	NASH	1,331	40.49	0.782
9615160	MORTON SALT	252	275.31	1.774
9615920	HALLSVILLE	873	131.27	0.496
9616030	LONE STAR SHELL ORDNANCE	28	81.43	0.857
9616240	HALLSVILLE	1,070 791	183.17 46.13	0.326 1.109
9616250	HALLSVILLE			0.909
9617310	RODESSA	264	101.21	0.105
9619090	CITY LAKE	306 438	31.49 30.50	0.103
9619120	CITY LAKE	98	0.00	0.000
9619210	CITY LAKE	552	569.51	4.428
9619220 961E60	CITY LAKE COOKVILLE	120	27.13	0.308
961E60 961E70	COOKVILLE	198	56.12	0.283
961E90	AIRLINE	1,294	322.02	2.027
961A00	WHITNEY	1,294	0.00	0.000
961B00	TURNERTOWN	23	25.09	0.000
961B10	TURNERTOWN	51	398.61	0.569
961B20	TURNERTOWN	416	69.71	0.308
961B40	LONGVIEW HEIGHTS	1.664	56.71	0.181

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Feeder Identification	Substation Identification	Number of Customers	2019 SAIDI Vegetation	2019 SAIFI Vegetation	
961F00	AIRLINE	1,182	100.00	0.581	
961F10	AIRLINE	804	3.48	0.058	
961F50	GREGGTON	350	71.47	0.049	
961F60	GREGGTON	98	0.00	0.000	
961F70	GREGGTON	1,714	35.36	0.253	
961F90	EVENSIDE	1,760	35.62	0.168	
961G00	EVENSIDE	911	77.95	0.425	
961G10	EVENSIDE	1,066	41.43	0.993	
961G70	WEST MT PLEASANT	112	155.39	1.063	
961G90	WEST MT PLEASANT	248	0.97	0.020	
961J10	SCOTTSVILLE	859	95.19	1.261	
961J30	SCOTTSVILLE	466	250.00	1.590	
961L00	WEST MT PLEASANT	175	3.66	0.051	
961L40	RICHMOND ROAD	398	61.33	0.198	
961N30	AIRLINE	1,835	11.53	0.071	
961P00	WINNSBORO	811	319.54	2.662	
961S30	AIRLINE	113	66.41	0.991	
961S80	TEXARKANA OPERATIONS	973	119.30	1.256	
961S90	TEXARKANA OPERATIONS	196	4.76	0.020	
961U50	BECKVILLE	357	87.82	0.375	
961U80	ATLANTA	682	4.61	0.063	
961U90	KNOX LEE	173	28.01	0.075	
961V20	GREGGTON	1,583	32.11	0.220	
961V60	39TH STREET	608	78.92	1.168	
961V70	39TH STREET	50	91.00	1.000	
961X30	LIEBERMAN	10	0.00	0.000	
961X40	GATES STREET	386	7.20	0.031	
961X60	GATES STREET	318	27.62	0.101	
961X70	GATES STREET	313	268.62	0.930	
961Z00	HUGHES SPRINGS	766	1.04	0.008	
962A90	GREGGTON	569	27.71	0.090	
962B60	HOWELL	144	1.03	0.014	
962B70	WINFIELD	565	36.42	0.218	
962B80	HOWELL	427	37.72	0.319	
962B90	HOWELL	1,271	354.67	1.558	
96NT144	SHAMROCK	629	56.79	0.202	
96NT148	SHAMROCK	759	5.58	0.041	
96NT1765	WELLINGTON	568	1.20	0.011	
96NT1770	WELLINGTON	275	0.00	0.000	
96NT1835	SHAMROCK	242	0.53	0.004	
96NT3025	MEMPHIS	306	4.21	0.033	
96NT3335	MEMPHIS	1,126	1.44	0.014	
96NT3535	ESTELLINE	116	0.00	0.000	
96NT3700	WELLINGTON	744	3.69	0.022	
96NT4040	CLARENDON	693	13.07	0.136	
96NT5005	CLARENDON	835	1.50	0.018	
96NT5845	HEDLEY	228	1.68	0.026	

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Feeder Identification	Substation Identification	Number of Customers	2019 SAIDI Vegetation	2019 SAIFI Vegetation
96NT5870	HEDLEY	139	0.73	0 014
96NT6115	CAREY	115	61.04	0 643

Feeders from last year that are not in this year's list

Todala Hall last fear that are not in this fear 5 hot					
Feeder ID		Substation Identification	Reason not		
		oubstation identification	in 2019		
-	961R60	IPC 69KV	retired		

SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO COMMISSION STAFF'S FOURTH REQUEST FOR INFORMATION

Question No. Staff 4-2:

In the testimony of Drew W. Seidel he states that VM is 'reactive performancebased". Please provide SWEPCO's process from start to finish for circuits/feeders that need to be trimmed and what the priorities are that SWEPCO considers in making these decisions.

Response No. Staff 4-2:

Please see Staff 4-2 Attachment 1, Pages 3 through 6 for a description of SWEPCO's process.

Prepared By: Paul D. Flory Title: Regulatory Consultant Sr

SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO COMMISSION STAFF'S FOURTH REQUEST FOR INFORMATION

Question No. Staff 4-3:

Provide a list of all 2021 feeders that need to be trimmed. Include the circuit name, miles that need to be trimmed, and costs per feeder.

Response No. Staff 4-3:

SWEPCO is currently in the planning phase for 2021. Therefore the circuit names, miles, and costs are not yet available.

Prepared By: Paul D. Flory Title: Regulatory Consultant Sr

SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO COMMISSION STAFF'S FOURTH REQUEST FOR INFORMATION

Question No. Staff 4-4:

Since VM is done by contractors, how does SWEPCO ensures Quality Control for VM. What are your guidelines or standards used for VM?

Response No. Staff 4-4:

Please see the company's response to Staff 4-2.

Prepared By: Paul D. Flory Title: Regulatory Consultant Sr